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OPERATION THUNDERCLAP: THE BOMBING OF DRESDEN

BY

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OPERATION THUNDERCLAP: THE BOMBING OF DRESDEN

AN INDIVIDUAL CASE STUDY

by

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## OPERATION THUNDERCLAP: THE BOMBING OF DRESDEN

### CHAPTER I

#### INTRODUCTION

As a Second Lieutenant, I was fortunate enough to be stationed in Germany for my initial tour of duty. Our division was located in Augsburg and Munich. Between trips to the field we were able to visit these towns. We were awed by their age and beauty.

Our second European tour came fifteen years later and wound up being five years long. This time we were first stationed in Heidelberg and then Mannheim and, again, we were able to visit many German Cities and towns. The age and beauty of these places had the same awesome effect they had had years before. Many of the towns were between one thousand and two thousand years old.

Towns usually grew in concentric circles with the oldest most historic and picturesque part of town being in the center. In the larger cities such as Augsburg, Munich and Heidelberg, the city center was referred to as the Altstadt (the old town). Here is where you would find the ancient structures, castles, cathedrals, and other beautiful and historic sites with theaters, shops, and restaurants mingled throughout. Near the center of

town was also where you would find the main passenger railroad station, the Hauptbahnhof.

Moving outward from the town center you would find a mix of business and residential areas in districts or suburbs of the central city. On the outskirts of town you would find heavier industrial complexes, freight yards and most of the rail freight terminals.

Some towns have a lot of heavy industry. Mannheim and Hamburg are two such towns. Both were bombed heavily during World War II. Some towns have little or no heavy industry. Heidelberg and Dresden are two such towns.

No bombs fell on Heidelberg during World War II, an amazing fact when you realize that Heidelberg is only 10 kilometers from Mannheim which was virtually leveled.

On the other hand, the Dresden Altstadt was totally destroyed by British and American Bombing 13 February 1945 (Shrove Tuesday) the last day of Fasching and 14 February 1945 (Ash Wednesday).<sup>1</sup> By all accounts it was a city crowded with refugees fleeing the Russian advance. On 8 May 1945, less than ninety days later, the war in Europe was over.<sup>2</sup> The allies were victorious.

To what extent did the bombing of Dresden expedite that victory? It had no effect on our victory or on the speed with which we reached it. It was unnecessary.



Then, why was Dresden bombed? This is the central question this paper addresses. In so doing I hope that the lessons learned will help the warfighter to better grapple with both the reality and the horror of war, and with the ethical decisions that must be made in the prosecution of war.

In My Lai, Republic of Vietnam 1967, hundreds of civilians lost their lives. In Dresden, 13-14 February 1945, the count was 135,000.<sup>3</sup>

#### BACKGROUND

My Lai was introduced as an example of a situation that escalated beyond what humanity and professional ethics would allow any reasonable leader to permit in similar circumstances. To understand the "why" of My Lai one must study the war in Vietnam. To understand Dresden one must begin by examining the bombings that preceded it. This paper will look at the bombing policies of the British and the Americans and the political considerations which influenced such policies. It will also examine the plan for the bombing and the aftermath of the bombing. Conclusions are presented in the instructor narrative.

### BOMBING ESCALATION

The bombing of German cities began on 10 May 1940 with an attack on the city of Freiburg. Fifty-seven civilians, including children, were killed. The Germans blamed the allies for the attack. As it turned out, the Germans had accidentally bombed their own territory. Before the bombings in Germany were over, 635,000 German civilians would be killed, 500,000 over a six year period and 135,000 during the attacks on Dresden.<sup>4</sup>

The German Luftwaffe bombed Rotterdam 14 May 1940. 980 people were killed. 78,000 people were left homeless. 20,000 buildings were destroyed. The Allies claimed after the war that this was an illegal bombing of an undefended city. Both Britain and Germany had signed the 1907 Hague convention prohibiting such bombing. The Germans said they were providing "artillery support" for the attacking army. In any case Rotterdam was not undefended and was a military target. However, the bombing infuriated allied public opinion.<sup>5</sup>

On 14-15 November 1940 the Germans bombed Coventry, England. They used a combination of time-lapse radio beams from home station and showers of incendiaries to guide the bombers in and light up the target area. 380 people were killed. The incidental gutting of the city center by fire caused the greatest damage to industry by cutting off utilities, gas, electricity and

water for 32 days. The effects of the fire were noted by Royal Air Force (R.A.F.) Bomber Command and incorporated into their night bombing strategy of deliberately trying to create firestorms called the "area offensive".<sup>6</sup> By many accounts the British people were never told of this deliberate strategy. This will be further discussed in the policy chapter that follows.

The first successful firestorm was generated by the R.A.F. during the bombing of Hamburg 24 July to 3 August 1943. 7,931 tons of bombs were dropped. Nearly half of them were incendiary. The heavily industrial city of Hamburg was well prepared for bombing with water, tunnels, shelters, alternate targets and camouflaged primary targets. However, the results of the bombs and the firestorm were disastrous. 50,000 civilians were killed. Destroyed were 4,881 factories and plants, all transportation systems, 214,350 homes, 180,000 tons of shipping and 12 bridges.<sup>7</sup>

On the night of 22-23 October, 1943, the R.A.F. bombed Kassel, center for Germany's Tank and Locomotive industries, with 1,824 tons of bombs creating a second firestorm that destroyed 26,782 homes, killed nearly 8,000 people and paralyzed industry by destroying the utilities.<sup>8</sup>

The German V-bombing of London began in June 1944.<sup>9</sup> Until the threat was eliminated by allied occupation of the coastal launch sites in September, London was extensively damaged with 75,000 buildings destroyed, 6,000 Londoners killed and 40,000 wounded. In all the Germans had launched 2,420 V-1s and 1,100 V-2 rockets.<sup>10</sup>

In a twenty minute raid on Koenigsberg, 30 August 1944, 480 tons of bombs were dropped. Three-hundred and forty-five tons were four pound thermite fire bombs. Four-hundred and thirty-five acres of built-up area were destroyed, 21 percent of the industrial buildings were heavily damaged and 134,000 people were homeless. The success of this raid was due to a new "offset" marking technique. Red markers were dropped at one location near the target area. Planes vectored in from different directions at different times, received directions from a Master Bomber on station, and hit different targets offset from the same point of reference. This technique was improved for firestorm raids on Darmstadt, Brunswick, Heilbronn and finally Dresden.<sup>11</sup>

Darmstadt was a chemical and optical center. It was bombed the night of 11-12 September 1944 with 872 tons of bombs, including 286,000 four pound thermite and one-hundred and fifty 4,000 pound blockbusters. The resultant "fire typhoon" generated hurricane force winds, created brilliantly hued, log-like, corpses that became the firestorm "logo", killed 12,000 people and destroyed 52 percent of the city and 21,487 homes.<sup>12</sup>

The night of 18-19 September the R.A.F. destroyed 79 percent of Bremerhaven, 297 acres, with 863 tons of bombs, 420,000 of which were thermite.<sup>13</sup>

A new technique was used with devastating success for the 14-15 October night bombing of Brunswick. Each of the 233 Lancasters was given a different vector and bombing time over the

same aiming point. This resulted in fires breaking out evenly over a widespread sector overwhelming the city fire brigades capabilities. This forty minute "sector attack" of 847 tons of bombs destroyed 655 acres, all the utilities, railroads, streetcars and the telephone network. This same technique would be used on Dresden four months later.<sup>14</sup>

## CHAPTER I

### ENDNOTES

1. Axel Rodenberger, Der Tod von Dresden: Ein Bericht über das Sterben einer Stadt, p. 32
2. Wilber H. Morrison, Fortress Without a Roof: The Allied Bombing of the Third Reich, New York, St. Martin's Press, p. 299.
3. David Irving, The Destruction of Dresden, New York, Holt, Rinehart and Winston, 1964, p. 9.
4. Ibid., p. 41.
5. Ibid., p. 25.
6. Ibid., p. 30.
7. Ibid., p. 50.
8. Ibid., p. 46.
9. Ibid., p. 54.
10. Morrison, pp. 242, 266.
11. Irving, pp. 58-59.
12. Ibid., pp. 60-61.
13. Ibid., pp. 62-63.
14. Ibid., p. 65.

## CHAPTER II

### POLICIES AND POLITICS

#### POLICIES

The bombing policies of World War II were founded in the theories of air power developed between World War I and World War II. Since they had never been tested, their evolution was tempered by actual experience, technological limitations, military objectives and politics.

The most coherent theory of airpower was articulated by Giulio Douhet in Rome in 1921. A former artillery officer, he became the leading proponent for a separate air force that would "destroy nations from the air."<sup>1</sup> His views were offered as a viable alternative to stalemate and the deaths of millions of soldiers in the trenches of World War I. He envisioned a nation seizing command of the air with the primary objective being to terrorize population centers. He said that, "First would come explosions, then fires, then deadly gases...the fires would spread while the poison gas paralysed all life."<sup>2</sup>

He believed that if ten or twenty or fifty cities were bombed, the nations social structure would break down completely, and the people would rise up and demand an end to war. He also saw airports, supply bases, production centers, oil supplies,

naval bases, arsenals and ships at anchor as viable targets. He was aware of the moral questions people might raise about his views but felt the end would come with "merciful speed," resulting in fewer casualties.<sup>3</sup>

In 1939 the British began bombing areas in German cities with factories and their workers. The R.A.F. Bomber Command was not skilled at finding or hitting targets so they shifted their strategy to the "dehousing" of the German population to break the Germans' will to resist.<sup>4</sup>

Before the war Britain believed it could conduct precision daylight bombing against enemy targets. Actual experience during the first six months of World War II proved otherwise. Bombers could not defend themselves from enemy fighters and R.A.F. fighters did not have sufficient range to provide escort. The decision was made that the R.A.F would bomb at night. Reconnaissance photos of those early bombings showed very poor results. Attacks against oil refinery targets from December 1940 to March 1941 produced similar results.<sup>5</sup>

In August 1941, the Butt Report confirmed that the British night "precision bombing" was very poor. Only one third of the aircraft that actually attacked targets were within 5 miles of them. That number dropped to less than one tenth for heavily defended targets.<sup>6</sup>

In 1942 there was a secret controversy over what the official R.A.F. bombing policy should be. Statistical evidence gathered on British cities that had been bombed failed to show



any evidence of a breakdown in morale. Nevertheless Bomber Command advocate and researcher, Professor F. A. Lindemann, Lord Cherwill, reported in a memorandum to the Prime Minister that,

Investigation seems to show that having one's house demolished is most damaging to the morale...we should be able to do ten times as much harm to each of the principal fifty-eight German towns. There seems little doubt that this would break the spirit of the people.<sup>7</sup>

Professor Lindemann also concluded that between March 1942 and mid-1943 it would be possible to make one-third of the German population homeless.<sup>8</sup>

Area bombing was adopted. Resources were diverted to Bomber Command, the only service taking offensive action against Germans in Germany in 1942.<sup>9</sup>

Five weeks later General Sir Arthur Harris took over Bomber Command. He was a strong advocate of area bombing throughout the war.<sup>10</sup> He openly scorned the advocates of selective bombing. He developed techniques for making his area bombing effective which included radio directional beaming, just as the Germans had used to bomb Coventry; and Pathfinder forces, in Mosquito bombers made of wood to avoid detection, who would light up the target city with flares and incendiaries.<sup>11</sup> About the new policy he said, "The decided policy of the war is to bomb the enemy soft until a comparatively small landforce...can overcome his remaining resistance."<sup>12</sup>

The night of 29-30 May 1943 the twin city of Wuppertal was bombed. Crews were given precision target maps overprinted with concentric circles and the targets marked in orange. Bomb aimers

were told to pencil in "x"'s over the residential area on the east end of the city as the aiming point so that all bombs would hit the city. This pretense of precision bombing was what the public and the bulk of the bomber crews were provided as the official bombing policy. The British Secretary of State for Air, Sir Archibald Sinclair, told the public that there were no deliberate attacks on residential areas. Sinclair felt that the Archbishop of Canterbury and other religious leaders on learning the truth would condemn the area offensive and that could impair the morale of the bomber crews.<sup>13</sup>

Ethics lessons given to bomber crews by the clergy either turned into heated discussions or were ridiculed. One lecture "The Ethics of Bombing" was referred to by one of the officer attendees as "The Bombing of Ethics." This deceptive policy of the British as to the actual bombing practices of the R.A.F continued through the end of the war.<sup>14</sup>

The Americans maintained a policy of daylight precision bombing of military targets, and each force was allowed to go its own way. However, in the final period of the war the line between selective bombing and area bombing all but disappeared.<sup>15</sup>

The U.S. relied more and more on radar rather than visual bombing. Only large targets could be identified. This kind of bombing closely resembled the British style in all but name.<sup>16</sup>

Direction of the strategic bomber forces was given to Eisenhower as the Supreme Allied Commander.<sup>17</sup>

The Combined Bomber Offensive was temporarily halted in autumn of 1943, due to high loss rates inflicted by the Luftwaffe. However, by the end of 1943, long range fighters were available and the now-protected bombers could resume full scale attacks. On D-day, the 12,837 allied aircraft (5,400 fighters) shot the opposing Luftwaffe force of 300 out of the sky in 10 hours. In December, during the Ardennes offensive, 900 Luftwaffe aircraft were destroyed. For the remainder of the war the allies totally dominated the sky. Yet, the war could not be ended except by the occupation of territory.<sup>18</sup>

The summer 1944 bombing campaign against oil plants, known as the "oil plan," was very successful. However, Sir Arthur Harris never changed his mind about the area bombing concept, and was so dissatisfied with the oil plan that he threatened to resign. Ironically the 27 fighters that were to rise up as the only German active defense against the massive bombing of Dresden were testimony to the effectiveness of the bombing of oil plant targets.<sup>19</sup>

It was now January, 1945. Sir Arthur Harris was retained. He was now advocating the bombing of eastern German cities.<sup>20</sup> Politics would soon give him a supporting hand.

### POLITICS

A British Chiefs of Staff memo of 31 July 1941 read,

We must first destroy the foundations upon which the war machine rests--the economy which feeds it, the morale which sustains it, the supplies which nourish it and the hopes of victory which inspire it.<sup>21</sup>

The Casablanca Directive reiterated this policy.<sup>22</sup>

The Allies met in Casablanca in 1943. Out of that meeting came "The Directive for the Bomber Offensive." This "Casablanca Directive" basically said that,

Your primary object will be the progressive destruction and dislocation of the German military, industrial and economic system, and the undermining of the morale of the German people to a point where their capacity for armed resistance is fatally weakened.<sup>23</sup>

However, at Casablanca, Churchill was unsuccessful in getting Americans to join the British Bomber Command campaign of night bombing even though he could point to Harris's "1,000 Bomber" raids that, "had got well along with the destruction of German cities."<sup>24</sup>

As the war drew to a close, it was feared by the allies that the impressive speed of the Soviet advance in the East would give them great negotiating strength at Yalta. Allied achievements in Italy and the Ardennes were not nearly as great in scope. Thus, the British and U.S. turned to massive strategic bombing as a way to impress the Soviets. THUNDERCLAP, a plan to bomb Berlin decisively, was dusted off and revised in July of 1944. Sir Charles Portal, chief of the British air staff, recommended to the Combined Chiefs of Staff in August that this blow of "catastrophic force" could be concentrated "on a single big town

other than Berlin and the effect would be especially great if the town was one hitherto relatively undamaged."25

On the 25th of January 1945 Churchill wanted to know what plans R.A.F. Bomber Command had laid for attacks on Berlin and "other large cities in eastern Germany."26

On 30 January 1945 the Combined Chiefs of Staff convened at Malta and authorized the allied air leaders to bomb Berlin and cities in east-central Germany. The military purpose of these attacks was to hamper the movement of German reinforcements to the Eastern Front, and to increase the confusion and panic in these cities crowded with refugees fleeing the Soviet advance.27

By 31 January a new order of priorities was agreed upon by the British and the Americans, first priority was the synthetic oil plants, second priority switched from the Ruhr communications to attacks on Berlin, Leipzig, Dresden and the other eastern population centers.28

Churchill went to Yalta believing that a dramatic strike on an eastern city could be produced before he left and would impress the Russians. However, weather would preclude any such bombings during the Yalta conference which was held from 4-11 February 1945.29 THUNDERCLAP forces would have to wait a few days longer.

## CHAPTER II

### ENDNOTES

1. Maurice Pearton, Diplomacy, War and Technology since 1830, Lawrence, University Press of Kansas, 1982, p. 201.
2. Ronald Schaffer, Wings of Judgment: American Bombing in World War II., New York, Oxford University Press, 1985, p. 21, directly quoting Guilio Douhet, Command of the Air, trans. Dino Ferrari, New York, 1942, p. 58.
3. Ibid., pp. 21-22.
4. Ibid., p. 36.
5. Melden E. Smith, The Bombing of Dresden Reconsidered, Ann Arbor, University Microfilms, 1976, pp. 140, 142, 152-154.
6. David Irving, The Destruction of Dresden, New York, Holt, Rinehart and Winston, 1964, p. 32.
7. Pearton, p. 235.
8. Irving, p. 35.
9. Pearton, p. 234.
10. Ibid., p. 237.
11. Kent Greenfield, American Strategy in World War II, Baltimore, The Johns Hopkins Press, 1963, p. 115.
12. R. J. Overy, The Air War 1939-1945, New York, Stein and Day, 1980, p. 75.
13. Irving, pp. 38, 39, 50.
14. Ibid., pp. 52, 227.
15. Greenfield, pp. 115, 116.
16. Gordon Daniels, Guide to the Reports of the United States Strategic Bombing Survey, London, University College, 1981, p. xviii.
17. Overy, p. 69.
18. Ibid., pp. 75, 77, 78.
19. Irving, p. 126.
20. Ibid., p. 52.
21. Ibid., p. 33.
22. Ibid.
23. Ibid., p. 36.
24. Greenfield, p. 115.
25. Irving, pp. 86, 87.
26. Smith, p. 227.
27. Greenfield, pp. 116, 117.
28. Irving, pp. 93-95.
29. Ibid.

## CHAPTER III

### THE PLAN: THUNDERCLAP

The Combined Air Staff issued a letter making Dresden and other eastern German cities the object of a modification of the THUNDERCAP plan which originally addressed the mass bombing of Berlin.<sup>1</sup>

This, according to Irving, was in response to Churchill's desire for some decisive bombing along the Eastern Front that he and the Allies could use as a bargaining chip with the Russians.<sup>2</sup>

Marshal Harris is credited with planning a double attack three hours apart. The first attack was designed to cut off communications to the active defenses, the fighters and the flak batteries and passive defenses such as the fire departments. The second attack was to catch fighters on the ground refueling and swamp the fire departments' abilities to control the expected blaze.<sup>3</sup>

The R.A.F. Bomber Command sector attack was an integral part of the Dresden attack designed to start a firestorm. The city was to be set on fire to provide a beacon for the second attack.<sup>4</sup>

The idea to demonstrate allied bomber power was Churchill's. Generals Harris and Spaatz, U.S. Eighth Air Force Commander, felt that the destruction of Dresden ("an architectural wonder") at

this late date was unnecessary. However, they did not resist. The plan was for the British to bomb at night and for the Americans to bomb the railyard during the day. By some accounts Stalin requested the bombings.<sup>5</sup> The Russians deny that they were ever involved in the decision. There is no clear documentation that they even knew about Dresden as a specific target, or that it was ever discussed as a target at Yalta.<sup>6</sup>

U.S. Army Chief of Staff General George Marshall endorsed the plan.<sup>7</sup>

General Laurence Kuter, the assistant chief of the U.S. Air Staff for plans, was against Air Ministry plans of July 1944 that called for raiding small and large towns, widespread strafing of civilians and a massive bombing of Berlin.<sup>8</sup>

According to Kuter, Arnold had more of an "open mind" and told Kuter to study the probability of success of a massive attack against German civilian morale.<sup>9</sup>

General Spaatz didn't want the U.S. Air Force "tarred with the morale bombing aftermath..."<sup>10</sup>

Eisenhower supported the original THUNDERCLAP plan to massively bomb Berlin. On 28 August 1944, He wrote Spaatz, "While I have always insisted that U.S. Strategic Air Forces be directed against precision targets, I am always prepared to take part in anything that gives promise to ending the war quickly."<sup>11</sup>

President Roosevelt's military advisor, Admiral Leahy, told the Joint Chiefs of Staff, 14 September 1944, it would be a mistake to formally endorse morale bombing of Germany.<sup>12</sup>



Due to lack of sufficient fighters in theater, no attacks occurred until 1945.<sup>13</sup>

Dissatisfaction about the bombing of Dresden had permeated to the lowest level of Bomber Command. No detailed target maps for Dresden had ever been made. Dresden air defenses were "unknown."<sup>14</sup> We deduce from negative crew reactions and lack of maps that Dresden had never been considered a serious target. Further, in Michie's very "pro" area-bombing book, written in 1943, he says that bombardiers rarely see the ground in Germany, so massive area bombing is the only viable tactic. A press reporter, he based his book on interviews with the senior leadership of the R.A.F. including a conversation with Air Marshal Sir Arthur Travers Harris in his home, October 1942. He goes on to list the "get-at-able" cities in Germany "worthy of obliteration" and states that, "marked down for obliteration on the target maps of the Bomber Command's underground headquarters are:..." and lists fifty cities and their value as a military target. Dresden was not among those listed. Leipzig and Chemnitz, cities with some legitimate military target value in the eastern sector, were listed.<sup>15</sup>

Irving remarks that Dresden's Old City (Altstadt) was contained in the sector marked for the firestorm to light the second attack. The R.A.F. Master Bomber was instructed that the purpose of the attack was to hinder railway and other communications passing through Dresden. Irving notes that,

it probably did not occur to any of the officers that the sector assigned ...for precision saturation attack, carpet bombing, did not contain one railway line, nor one of Dresden's eighteen passenger or freight terminals or the Marienbrücke railway bridge across the Elbe, the most important one for a long way in either direction.

If such thoughts did occur, they were not mentioned by the Master Bomber then or eighteen years later when interviewed by Irving.16

## CHAPTER III

### ENDNOTES

1. David Irving, The Destruction of Dresden, New York, Holt, Rinehart and Winston, 1964, p. 92.
2. Ibid., p. 93.
3. Ibid., p. 105.
4. Ibid., pp. 107, 110.
5. Wilber H. Morrison, Fortress Without a Roof, New York, St. Martin's Press, 1982, p. 291.
6. Irving, pp. 94, 100.
7. Ronald Schaffer, Wings of Judgment, New York, Oxford University Press, 1985, p. 95.
8. Ibid., p. 80.
9. Ibid., p. 81.
10. Ibid., pp. 83-84.
11. Ibid., p. 84.
12. Ibid.
13. Ibid.
14. Irving, pp. 113-117.
15. Alan A. Michie, The Air Offensive Against Germany, New York, Henry Holt and Company, pp. ix, 72-77, 90.
16. Irving, p. 120.

## CHAPTER IV

### VALIDITY OF THE TARGET

The validity of Dresden as a military target is questionable. The Allies claim it was bombed to disrupt the traffic flow through the city. The results point to pure terror bombing. As Irving points out, high explosive bombs would have been far more effective against transportation targets instead of the tremendous number of incendiary bombs. The large Friedrichstadt marshalling yard was scarcely hit. The only major railroad bridge over the Elbe was undamaged. Rail service was restored in three days. People, not installations, were destroyed. Irving says convincingly, "No strategist could honestly assume that German troops would...be marching in massed formations through the center of the city to the Eastern Front."<sup>1</sup> Dresden had no military value and was bombed and destroyed purportedly to sap the will of the German spirit.<sup>2</sup>

An attack in October 1944 was viewed by Dresdeners as a mistake. Actually, the two Dresden western suburbs attacked by 30 American Bombers, were secondary targets bombed in lieu of a nearby oil refinery. A second small attack on Dresden's outskirts occurred on 16 January 1945, when 133 sorties of American Bombers attacked the marshalling yard. American crews

noted the absence of flak. The Reich had previously diverted all of her flak guns elsewhere.<sup>3</sup>

The Dresdeners developed a strong belief that their city center would never be attacked.<sup>4</sup>

There were a large number of Allied prisoners of war (POWs) held in and around Dresden, 26,620 including 207 Americans. Sir Arthur Harris has stated that no POW information was contained in the bombing dossier on Dresden, although the International Red Cross had provided information to the British War Office on POWs status in January 1945. Additionally, Bomber Command's dossier on Dresden showed that there were large numbers of POWs in the area.<sup>5</sup>

Five million refugees were streaming westward. Dresden's normal population of 630,000 had more than doubled prior to the attack.<sup>6</sup>

Post war accounts show that target planning committees did not consider Dresden an important target. However, crews were briefed otherwise. Dresden was referred to as a "fortress." "Gestapo Headquarters." "...a large arms and supply dump." Allegedly there was a "large poison gas plant." "...an important industrial area." Not many crews were warned of the POWs in the suburbs.<sup>7</sup>

Combined Bomber Directive 3 issued 15 January 1945 for the air forces had designated petroleum industry targets priority one, destruction of enemy lines of communications priority two "with particular emphasis on the Ruhr."<sup>8</sup>

During the Combined Chiefs of Staff meeting in Malta, the second priority was changed to include eastern cities "where heavy attack will cause great confusion in civilian evacuation from the East and hamper reinforcements." The U.S. target was to be the railroad marshalling yard.<sup>9</sup>

Six-hundred and fifty-thousand incendiary thermite bombs , 75 percent of the load, would be used to ignite the houses and roofs broken by high explosive bombs. Trunks of incendiaries would be dropped with each high explosive bomb.<sup>10</sup>

## CHAPTER IV

### ENDNOTES

1. David Irving, The Destruction of Dresden, New York, Holt, Rinehart and Winston, 1964, pp. 176-178.
2. Thomas A. Mappes and Jane S. Zembaty, Social Ethics: Morality and Social Policy, New York, McGraw Hill, 1977, p. 415.
3. Irving, pp. 69, 75, 80.
4. Ibid., p. 73.
5. Ibid., pp. 82-83, 99.
6. Ibid., pp. 81, 98.
7. Ibid., p. 137.
8. Ibid., p. 80.
9. Ibid., pp. 95-96.
10. Ibid., pp. 138, 139.

## CHAPTER V

### THE BOMBING OF DRESDEN

In the United States Strategic Bombing Survey Physical Damage Division Report is this simple statement, "The greatest destruction was probably at Dresden where the losses, as reported by German fire department officers, were greater than at Hamburg."<sup>1</sup> The escalation of bombing, the policies born out of the reality of vulnerable aircraft and inaccurate targeting, the political necessity to contribute in some significant way to the impending Russian victory in the east, the selection of an essentially unbombed target for maximum effect, the perfection of the sector attack and associated firestorm techniques and an open weather window over Dresden during the attack had led to this moment.

The British hit Dresden the night of 13-14 February. The streets were crowded with civilian evacuees. The next morning, while the smoke from the fires was still rising 15,000 feet into the air the Americans struck with another smashing raid. In their directions for these attacks the Americans listed targets. They were, nevertheless, terror raids.<sup>2</sup>

There were three attacks during a 14 hour and 10 minute period, 13-14 February 1945. During the first two attacks,



R.A.F. Bomber Command dropped 2,978 tons of bombs. Ten hours later the Americans dropped 771 tons.<sup>3</sup> P-51 Mustang fighters with range equal to the bombers and ability to outmaneuver the Luftwaffe provided escort.<sup>4</sup>

Zero hour was set at 2215, 13 February. The weather was clear over Dresden. Bright red flares were accurately placed one-hundred feet from the marking point, a large stadium. By comparison, Hamburg's markings were from one-half to seven miles wide of the aiming point.<sup>5</sup>

Only 27 Luftwaffe night fighters responded to the attack. The R.A.F. Master Bomber noted the absence of flak, and had the planes at the highest altitude drop down for a better aim. The Germans, believing Dresden would never be attacked, had sent their defenses to other legitimate target areas. The Master Bomber of the first raid told Irving that because of the weather, "if the first raid on Dresden had been timed ten or fifteen minutes earlier, the whole double blow would have failed." Irving reveals his bias with the statement,

thus close was Bomber Command to being cheated of its greatest, climatic success in its area offensive against Germany; and, equally...close...were Britain's post-war enemies to being robbed of one of their greatest propaganda indictments against her."<sup>6</sup>

Five-hundred and twenty-nine Lancasters came in over France and Southern Germany for the second strike. It lasted twenty minutes, from 0130 to 0150. The firestorm happened exactly as Air Chief Marshal Harris had planned.<sup>7</sup>

## Eyewitness Accounts

The German Civil Defense director in Dresden described the first attack as,

A slowly developing series of fires scattered evenly across a large area, fires which were not extinguished by the inhabitants (who preferred to remain in their basements, cowed by the explosions of time bombs) and which suddenly multiplied and spread as thousands of individual conflagrations ignited.<sup>8</sup>

Comments of an air crew,

The fantastic glow from 200 miles away grew ever brighter as we moved into the target. At 20,000 feet we could see details in the unearthly blaze that had never been visible before; for the first time in many operations I felt sorry for the population below.<sup>9</sup>

"Dresden was a city with every street etched in fire."<sup>10</sup>

Four-hundred feet of film shot for ten minutes confirmed no flak.<sup>11</sup>

The pilot of the last aircraft said,

There was a sea of fire covering in my estimation some 40 square miles. The heat striking up from the furnace below could be felt in my cockpit. The sky was vivid in hues of scarlet and white, and the light inside the aircraft was that of an eerie autumn sunset. We were so aghast at the awesome blaze that although alone we flew around in a standoff position for many minutes before turning for home, quite subdued by our imagination of the horror that must be below. We could still see the glare of the holocaust thirty minutes after leaving.<sup>12</sup>

Sixteen-hundred acres were destroyed that one night. The total for the 93 day London blitz was only 600 acres. All telephone and power facilities were knocked out with the first bombing. The central passenger railroad station, the Hauptbahnhof, was destroyed.<sup>13</sup>

Seventy-two P-51s provided fighter cover for American bombing the next day. They bombed from 1200-1223.<sup>14</sup> Three hundred and eleven B17s dropped 771 tons of bombs through heavy clouds.<sup>15</sup>

Dresden burned for seven days and eight nights. It was the most devastating firestorm ever experienced in Germany.<sup>16</sup>

Adequate numbers of ventilated bunkers had never been built in Dresden as they had been in other German cities. It was not expected that Dresden would be bombed.<sup>17</sup>

U.S. fighters strafed the columns of people. There were many casualties and people were demoralized by this low level strafing which Irving says became a "permanent feature" of American attacks.<sup>18</sup>

Other quotes reflected the horror on the ground.

All over the ground lay these corpses shrivelled in the intense heat to about three feet long. All the way across the city we could see victims lying face down literally glued to the tarmac, which had softened and melted in the enormous heat (over 1000 degrees in the firestorm area).<sup>19</sup>

Of the 135,000 who died, most died of carbon monoxide poisoning or lack of oxygen.<sup>20</sup>

## CHAPTER V

### ENDNOTES

1. United States Strategic Bombing Survey, Physical Damage Division Report (ETO) Europe, Physical Damage Division, April, 1947, p. 23.
2. Kent Greenfield, American Strategy in World War II: A Reconsideration, Baltimore, The Johns Hopkins Press, 1963, p. 117.
3. David Irving, The Destruction of Dresden, New York, Holt, Rinehart and Winston, 1964, pp. 11, 44.
4. James M. Morris, History of the U.S. Army, New York, Exeter Books, 1986, p. 166.
5. Irving, pp. 121-129.
6. Ibid., pp. 131, 135.
7. Ibid., pp. 112, 135.
8. Ibid., pp. 110-112.
9. Ibid., pp. 142-143.
10. Ibid., pp. 143, 146.
11. Ibid.
12. Ibid.
13. Ibid., pp. 154-155, 164, 174.
14. Ibid., p. 153.
15. Wesley Craven and James Cate, The Army Air Forces in World War II, Volume III, Chicago, University of Chicago Press, 1951, p. 731.
16. Irving, pp. 154, 162.
17. Ibid., p. 170.
18. Ibid., p. 181.
19. Ibid., pp. 176-177, 180-184.
20. Ibid., p. 178.

## CHAPTER VI

### REACTIONS

By Craven's Army Air Force official account, the Secretary of War had to be apprised of Dresden's importance as a transportation center and the Russian request for its neutralization.<sup>1</sup>

Goebbels propaganda machine "leaked" expected final death total of 250,000.<sup>2</sup>

Official British reports called Dresden a target of "first class importance" and "vital to the enemy." The BBC referred to the "great industrial city like Sheffield." BBC reported that the raid had been promised to the Russians.<sup>3</sup>

Churchill wrote a memo decrying the severity of this type of raid. The Russians are credited with requesting the raid.<sup>4</sup>

After the war, the communists tolled church bells in East Germany every 13th of February from 2210-2230, the period of the R.A.F. bombing. The custom and the propaganda value spread to West Germany.<sup>5</sup>

The U.S. State Department announced, 11 February 1953, that the bombing was in response to Soviet requests for increased aerial support.<sup>6</sup>

Ten years later the Manchester Guardian reiterated the State Department's version.<sup>7</sup>

Based on a R.A.F. Air Commodore's statement to the press at Supreme Headquarters Allied Expeditionary Forces (S.H.A.E.F.) the Associated Press (AP) printed this story,

Allied air chiefs have made the long awaited decision to adopt deliberate terror-bombing of German population centers as a ruthless expedient of hastening Hitler's doom. More raids such as those recently carried out by the bombers of the Allied air forces on the residential sections of Berlin, Dresden, Chemnitz and Kottbus are in store for the Germans, for the avowed purpose of heaping more confusion on Nazi road and rail traffic, and to sap German morale. The all-out war on Germany became obvious with the unprecedented daylight assault on the refugee capital with civilians fleeing from the Red tide in the East.<sup>8</sup>

Generals Eisenhower and Arnold were very disturbed by these reports. When queried, General Spaatz satisfied Eisenhower with a message that said that the U.S. Strategic Army Air Force (U.S.S.A.A.F.) bombing policy had not been changed.<sup>9</sup>

A second S.H.A.E.F. report took back the first and said the targets were transportation or oil facilities. Refugee killings were accidental. Berlin was bombed to destroy communications, as was Dresden.<sup>10</sup>

In England, Sir Archibald Sinclair said the AP report was not true.<sup>11</sup>

No documents have been found to link the Soviets to a formal request for bombing of the Eastern Front.<sup>12</sup>

In America the matter died quietly behind closed doors.<sup>13</sup>

Alexander McKee recalls that in 1945 in Germany as an allied soldier he heard "whispers of something unimaginably dreadful

having been done at Dresden." He said that, "the proud people of Hamburg...accepted that there had been some reason for the Allies to try to level the city to the ground. But for Dresden, they said, there had been no excuse at all."<sup>14</sup>

McKee said political and military leaders were trying to prove they were "entirely innocent or entirely right" Some documents remained classified for thirty years. There had been something special about the horror of Dresden.<sup>15</sup>

In 1961 Harris told Irving,

The order would have come from SHAEF over the telephone radio or teleprinter, and it would not need written confirmation; certainly it was not I who had selected Dresden for bombing that night.<sup>16</sup>

Air Marshal Saundby recalled that the order came from the Air Ministry as instructed by the Prime Minister's Office and that the Russians had requested it.<sup>17</sup>

Smith reiterates that there was no evidence of a literal, specific Soviet request. He concedes that the request to "paralyze the junctions" of Berlin and Leipzig could have been interpreted by the Allies to mean the rail center at Dresden.<sup>18</sup>

Smith points to Churchill as the initiator in his harsh memo prior to Yalta,

I did not ask you last night about harrying the German retreat from Breslau. On the contrary, I asked whether or not Berlin and other large cities in East Germany should not now be considered especially attractive targets. I am glad that this is "under examination." Pray report to me tomorrow what is going to be done.<sup>19</sup>

Shortly thereafter Harris received a letter from Sir Norman Bottomley, excerpted here.

We should use available effort in one big attack on Berlin and related attacks on Dresden, Leipzig, Chemnitz or any other cities where a severe blitz will not only cause confusion in evacuation from the East but will also hamper the movement of troops from the West...with the particular object of exploiting the confused conditions which are likely to exist in the above mentioned cities during the successful Russian advance.<sup>20</sup>

'Orders given the next day by the Intelligence Officers to the crews about the Chemnitz bombing were clear in their intent, "Tonight your target is to be Chemnitz. We are going there to attack the refugees who are gathering there, especially after last night's attack on Dresden."<sup>21</sup> Churchill notwithstanding, there was plenty of responsibility for the bombing to go around.



## CHAPTER VI

### ENDNOTES

1. Wesley Craven and James Cate, The Army Air Forces in World War II, Volume 3, Chicago, University of Chicago Press, 1951, p. 731.
2. David Irving, The Destruction of Dresden, New York, Holt, Rinehart and Winston, 1964, p. 207.
3. Ibid., p. 214.
4. Ibid.
5. Ibid.
6. Ibid.
7. Ibid.
8. Ibid., p. 218.
9. Ibid., pp. 218, 220.
10. Ibid., p. 222.
11. Ibid., p. 227.
12. Ibid., p. 228.
13. Ibid.
14. Alexander McKee, Dresden 1945: The Devil's Tinderbox, New York, Dutton, 1984, pp. 12-13.
15. Ibid., p. 19.
16. Melden E. Smith, The Bombing of Dresden Reconsidered, Ann Arbor, University Microfilms, 1976, pp. 237-238.
17. Ibid., p. 239.
18. Ibid., p. 246.
19. Ibid., p. 227.
20. Ibid., p. 228.
21. Irving, p. 155.

## CHAPTER VII

### JUST WAR CRITERIA

Given the information we now have about the bombing of Dresden, let us determine if the bombing was "just" by applying the Just War criteria. First let us look at the criteria itself. An outline is provided at Appendix A.1

To begin with, a "law abiding" nation must have a just recourse before going to war. This just recourse is called JUS AD BELLUM.

#### JUS AD BELLUM

This recourse is considered just or permissible when six conditions have been met.

1. Just Cause. You have been attacked or you are about to be attacked or you are assisting a nation that has been or is about to be attacked.
2. Legitimate authority. War is declared by those in your nation with that authority.
3. Just intentions (attitudes and goals). As a nation your intentions are limited to repelling your attacker and securing a fair peace.

4. Proportionality (results are more good than evil). The good you achieve as a result of the war must be reasonably proportional to the evils you anticipate causing.

5. Last resort. You have exhausted all peaceful alternatives to war.

6. Reasonable hope of success. You have reasonable hope of achieving the good you intend.<sup>2</sup>

Next, let us review the additional criteria that applies to a "law abiding" nation now engaged in a war: just conduct in war, JUS IN BELLO.

#### JUS IN BELLO

There are two principles used to determine actions that are morally permissible in war.<sup>3</sup>

1. Discrimination (Noncombatant Immunity). Having met the criteria for just recourse to war. You must use force in that war in such a way as to discriminate between combatants and noncombatants. This principle is "absolutely central to any discussion of aerial bombardment."<sup>4</sup>

2. Proportionality (amount and type of force used). The amount of force used cannot outweigh the good it is intended to achieve.<sup>5</sup>

James Child's second chapter "Permissible Resort to War" provides greater detail concerning the origins of the Just War Doctrine and its application.

When the criteria of Just War is applied to the Bombing of Dresden it is violated. Specifically violated are the principles of JUS IN BELLO, discrimination and proportionality. The Associated Press article referring to the bombing as terror raids was correct.

The lessons learned from Dresden are even more significant today as we enter a new era of conventional arms control negotiations. Conventional bombing capabilities have fallen into the shadow of nuclear and thermonuclear capabilities. We must reexamine the lessons of the past if we are to make conscious, just decisions about the way we may prosecute war in the future.

## CHAPTER VII

### ENDNOTES

1. As posted in Seminar Room 4, U.S. Army War College, Carlisle Barracks, 1989.
2. Thomas A. Mappes and Jane S. Zembaty, Social Ethics Morality and Social Policy, New York, McGraw Hill, 1977, p. 413.
3. James W. Child, Nuclear War The Moral Demension, Transaction Inc., 1986, p. 21.
4. Child, p. 21.
5. Mappes, p. 414.

## CHAPTER VIII

### CONCLUSIONS

We have looked at a series of interrelated events that all, in some way, culminated in the deadly and effective bombing of the city of Dresden. It is only by this type of examination that we can begin to come to grips with why it happened. Like a sleuth we collect and examine much evidence before we reach a conclusion that is not only feasible, but likely.

There is enough documented historical information available to make a case for several rationales. Missing is the environment in which the war took place. Without that atmosphere of human emotion and public awareness, replicating and understanding the real rationale is nearly impossible.

Until the Dresden bombing, allied and German bombing was essentially tit-for-tat, as awful and awesome as that practice on both sides became. Both sides considered the cities they were bombing to be legitimate military targets. The years of allied bombing had rendered the Luftwaffe ineffective and had finally begun to take its toll on German industrial production. It had nearly eliminated German petroleum product production. The bombing of German industrial and military targets seemed to offer

offer the prospect of ending the war sooner and saving the lives of more soldiers.

The bombing escalation, bombing policies born out of theory and tempered by the reality and limitations of strategic bombing, led to the type and magnitude of bombing experienced at Dresden. The political objective, to be part of the Russians' eastern front victory with the only weapon we could get that far east in order to gain post-war negotiating leverage, resulted in the selection of target cities which included Dresden. The perfect execution of the firestorm technique by the R.A.F., under the tutelage and single-minded determination of Sir Arthur Harris--who truly, in my mind, was the primary force that kept the momentum rolling towards Dresden--and the perfect weather window that opened up for Harris' three-hour double blow scenario, resulted in a technically perfect firestorm. Morally it was troubling, though not much less than the fact that our P-51s were strafing the long streams of refugees going in and out of Dresden the next day. All of these interrelated events culminated in the most effective and shocking bombing in World War II Europe.

The driving force for the bombing of Dresden has been frequently attributed to Churchill. As the spokesman at Yalta he certainly got the wheels in motion. However, it was a military proponent, with an unwaivering belief that the mass destruction of German cities would ultimately destroy the morale and will to fight of the German people, who created the means of mass

destruction demonstrated by the destruction of Dresden. As I have documented throughout this paper, Sir Arthur Harris was that proponent and his R.A.F. Bomber Command was the means that "made the difference". This conclusion is not meant to be judgmental. Rather, it is to demonstrate by actual example the degree to which the zealousness of one senior commander can profoundly effect the execution of policy having significant ethical implications.

As Chaplain Tatum of the U.S. Army War College said to me, "The Army and soldiers on the ground make ethical decisions at every doorway. Is the enemy in there? Do I risk the lives of the civilians to find out? Do I risk my life and those of my buddies if I don't." Unlike the Army where these ethical decisions are made day by day at each doorway, village or foxhole, the air crews carry out their orders far above the populace and the air leaders are even further removed.

Perhaps the great irony of the Dresden episode is that, having finally reached that level of area bombing proficiency, the technology was transferred to the Pacific, this time by the Americans for the bombing of Japan. The firestorm in Tokyo consumed 85,000 lives.<sup>1</sup> Surrender was not forthcoming. Once more it was demonstrated that conventional carpet bombing, despite its cost in human life, did not break the morale of a nation nor destroy its will to fight.

The estimated cost in American lives to end the war was one million American soldiers, a price President Truman refused to



pay. On his authority the two atomic bombs were dropped, one on Hiroshima and one on Nagasaki. The Japanese surrendered shortly afterward. It had taken atomic weapons to validate Douhet's theory of mass destruction, and the conventional firebombing of Tokyo to further confirm the futility of the destruction of Dresden.

In both the nuclear and conventional case, the enduring question remains for the warfighter. Can there be a compatibility between means and ends, or in war must the higher ethical consideration of winning override all other considerations on how to do so? How far should we go in the suppression of our traditional American values in order to secure a greater, fully justified end? That, of course, is the crux of JUS IN BELLO.

## CHAPTER VIII

### ENDNOTES

1. David Irving, The Destruction of Dresden, New York, Holt, Rinehart and Winston, 1964, p. 9.

## APPENDIX I

### METHODOLOGY

1. Mode. The Dresden Case Study is designed for active learning in the Seminar Mode.
2. Introduction. The Dresden Case Study provides the senior decisionmaker ample opportunity to examine and discuss the many facets of a significant World War II bombing decision that had far reaching ethical implications in its planning, execution and aftermath. While a certain bias is probably evident in the text, it should not be viewed by the reader as conclusive. The bombing of Dresden is a controversial topic that still generates heated debate and should facilitate lively discussion.
3. Learning Objectives. To enable the students to:
  - a. Further develop their high level ethical decisionmaking skills through the analysis of a real-world case study with significant ethical implications.
  - b. Become more familiar with the Just War Criteria and its application in a real world situation.

c. Learn about an historically significant military operation in World War II.

#### 4. Student Requirements.

##### a. Tasks.

(1) During the directed-study phase, all students will read the Case Study and develop oral briefings of their assigned portion of the case as well as answers to the questions assigned to their subgroup.

(2) During the seminar, each subgroup will brief its assigned portion of the case study and then present the answers it has developed for its assigned questions.

##### b. Required Reading.

(1) Case Study Text.

(2) Bibliographic readings as assigned.

5. Points to Consider. Refer to Dresden Case Study Appendix III. Student questions and discussion points should be divided among the subgroups for later presentation to the entire seminar.

## APPENDIX II

### JUST WAR CRITERIA

#### JUS AD BELLUM

(JUST RECOURSE TO WAR)

- \* JUST CAUSE
- \* LEGITIMATE AUTHORITY
- \* JUST INTENTIONS (ATTITUDES AND GOALS)
- \* PROPORTIONALITY (MORE GOOD THAN EVIL RESULTS)
- \* LAST RESORT
- \* REASONABLE HOPE OF SUCCESS

#### JUS IN BELLO

(JUST CONDUCT IN WAR)

- \* DISCRIMINATION (NONCOMBATANT IMMUNITY)
- \* PROPORTIONALITY (AMOUNT AND TYPE OF FORCE USED)

## APPENDIX III

### STUDENT QUESTIONS AND POINTS TO CONSIDER

1. What distinguishes the bombing of Hamburg, Bremerhaven, Darmstadt and Heilbronn from the bombing of Dresden?
2. To what extent did these previous bombings contribute to the bombing of Dresden?
3. What is the ethical difference between the killing of noncombatants with night area bombing and those killed during daylight as collateral effects of "precision" bombing?
4. Was the bombing of Dresden "just" with respect to the Just War Doctrine? Why or why not? Discuss the relevant principles of the doctrine to defend your answer.
5. How did American bombing policy differ from that of the British? Which policy had the most profound effect on Dresden?
6. What was the role of American fighter planes in the Dresden attack? Defensive? Offensive?

7. To what extent does a non-combatant citizen bear responsibility for the actions of his country's leadership?
8. To what extent did political objectives contribute to the Dresden attack?
9. What role did senior military leaders play?
10. How did the "lesson" of Dresden effect the subsequent U.S. bombing policy in the Pacific? Explain.
11. To what extent was the bombing of Dresden later overshadowed by the Atomic Bombings in the Pacific Theater?

## APPENDIX IV

### INSTRUCTOR NOTES

1. The Dresden Case Study is assembled in Individual Study Project (ISP) format as shown in the Army War College "Research and Style Manual" for academic year 1989. It is designed to be divided into two separate packages.

#### a. Student Package.

- (1). APPENDIX I. METHODOLOGY.
- (2). APPENDIX II. JUST WAR CRITERIA
- (3). CHAPTER I. INTRODUCTION
- (4). CHAPTER II. POLICIES AND POLITICS
- (5). CHAPTER III. THE PLAN: THUNDERCLAP
- (6). CHAPTER V. THE BOMBING OF DRESDEN
- (7). CHAPTER VI. REACTIONS
- (8). APPENDIX III. STUDENT QUESTIONS

#### b. Instructor package.

- (1). APPENDIX IV. INSTRUCTOR NOTES
- (2). ABSTRACT
- (3). TABLE OF CONTENTS
- (4). STUDENT PACKAGE AS SPECIFIED ABOVE.
- (5). CHAPTER IV. VALIDITY OF THE TARGET



(6). CHAPTER VII. JUST WAR CRITERIA  
DISCUSSION

(7). CHAPTER VIII. CONCLUSIONS

(8). APPENDIX V. DISCUSSION OF STUDENT  
QUESTIONS

2. The packages specified above are the suggested division of case study material and should be tailored as desired by each instructor. E.G. one might include the CHAPTER VII JUST WAR discussion in the student issue, or provide it to the student after the seminar.

3. Guidance provided at in-progress review (IPR) 3 February 1989. Attendees: COL E. J. Glabus, Chairman, DCLM; COL R. H. Goldsmith, DCLM, PA, FI; CH(COL) T. C. TATUM, DCLM; DR. R. Kennedy, FA, and LTC Pete Bein, USAF, student.

a. Avoid being judgmental or moralistic. Allow the seminars to draw their own conclusions.

b. Issues have been persuasively argued both ways in the past.

c. The objective is to focus the students on the ethics explicit and implicit in the study.

4. The suggested student questions are designed to create the "snowball" effect in the seminar mode. That is, to initiate discussion of the ethical issues explicitly or implicitly expressed in the case study. There are numerous ethical issues contained in the case study, not to mention the second and third order points that an animated discussion of the subject is sure to produce. The following ethical points occur in the chapters shown and should be surfaced by students (or the instructor) during the discussion period.

a. CHAPTER I.

(1). Destruction of the ancestral heart of a city, in this case the old town or Altstadt.

(2). Bombing of an essentially undefended city.

(3). Deliberate strategy to develop and improve techniques to create a firestorm.

b. CHAPTER II.

(1). Influence of early air power theory.

(2). "Dehousing" of factory workers.

(3). Actual policy vs public policy.

(4). Morale bombing.

(5). American imprecise "precision" bombing and resultant collateral damage to noncombatants. Address noncombatants in Just War discussion.

(6). Influence of political leaders and their objectives.

c. CHAPTER III.

(1). Senior leader "mindwrestling" of ends vs means.

(2). Situational ethics.

d. CHAPTER IV (Instructor information. Optional student issue.)

(1). Actual intent of bombing. Bomb mix vs alleged targets.

(2). Morale bombing.

(3). Bombing of noncombatants, i.e. civilians, refugees and allied POWs.

(4). Misleading crew briefings.

(5). Misleading the public.

e. CHAPTER V.

(1). Bombing of an essentially undefended city.

(2). Just War Criteria. Provided to the instructor and students in APPENDIX II, with discussion for instructors in CHAPTER VII.

(3). Strafing of refugees.

f. CHAPTER VI.

(1). Second and third order effects of ethically debatable policies and actions.

(2). Retreat from a policy.

(3). Enemy propaganda value.

(4). Intent.

g. CHAPTER VII. (Provided for instructor preparation. Optional issue to students.)

h. CHAPTER VIII. (Provided for instructor preparation. These author views are provided as a point of departure for the instructor and do not represent a "school solution.")

5. A discussion of Student questions is provided at APPENDIX V.

## APPENDIX V

### DISCUSSION OF STUDENT QUESTIONS

1. What distinguishes the bombing of Hamburg, Bremerhaven, Darmstadt and Heilbronn from the bombing of Dresden?

A. These are all industrial cities. Dresden was not. Question should frame the first facet of ethical debate for the student.

2. To what extent did these previous bombings contribute to the bombing of Dresden?

A. R.A.F. bombing techniques were practiced and perfected. The "area offensive", high percentage of incendiary to high explosive bomb ratios used by the R.A.F. Bomber Command, the tit-for-tat heavy bombing of both allies and Germans, the "offset" marking technique, and the sector attack", would all be used with devastating effectiveness at Dresden.

3. What is the ethical difference between the killing of noncombatants with night area bombing and those killed during daylight as collateral effects of "precision" bombing?

A. Question has many acceptable answers. Students should key on the intent or intentions of the bombings.

i.e. are noncombatants the targets or unintentional casualties. The difference may seem slight, but is significant.

4. Was the bombing of Dresden "just" with respect to the Just War Doctrine? Why or why not? Discuss the relevant principles of the doctrine to defend your answer.

A. This question is designed to open up the discussion of Just War Criteria. Use CHAPTER VII JUST WAR CRITERIA instructor notes for reference and preparation.

5. How did American bombing policy differ from that of the British? Which policy had the most profound effect on Dresden?

A. British policy was night area bombing. American policy was daylight precision bombing. American "precision" bombing was imprecise due to a host of external factors including enemy fighter attacks, flak, frequently marginal weather over Germany and relatively unsophisticated radar. This question relates to the "how much collateral damage to civilians is too much?" issue.

6. What was the role of American fighter planes in the Dresden attack? Defensive? Offensive?

A. Bomber defense and antipersonnel strafing. This Question is designed to initiate discussion of the ethical implications of strafing noncombatants.

7. To what extent does a non-combatant citizen bear responsibility for the actions of his country's leadership?

A. This question is designed to facilitate exploration of noncombatant immunity. James Child's text provides ample discussion material on pages 21 and 22. Pages 11 through 22 of his text are included in the assigned bibliographic readings for students.

8. To what extent did political objectives contribute to the Dresden attack?

A. Student should surface the issues surrounding the Yalta Conference.

- \* Formidable Russian advances on the Eastern Front.

- \* Air power as the only projectable combat power during the timeframe in question.

- \* The perceived need for an allied "bargaining chip" at Yalta in discussions with Stalin and for future postwar negotiations with the Russians.

9. What role did senior military leaders play?

A. Question is designed to draw out discussion of the appropriate role of military leaders in dealing with political objectives. At what point should a moral line be drawn? Is there such a point? Should there be? In the Dresden decision the relevant "bottomline" was that the Combined Chiefs ultimately supported the THUNDERCLAP plan to

massively bomb Eastern German cities, Dresden being one of the cities. This question should produce thoughtful, incitful student commentary.

10. How did the "lesson" of Dresden effect the subsequent U.S. bombing policy in the Pacific? Explain.

A. There was no short-term lesson learned. The irony of Dresden was that the firestorm techniques perfected there were exported to the Pacific for similar bombings of Japan. This question should generate much discussion and, hopefully, serious thought about senior leader ethical considerations.

11. To what extent was the bombing of Dresden overshadowed by the Atomic Bombings in the Pacific Theater?

A. The Atomic Bombs did overshadow the conventional bombings at the end of World War II. However, the lessons learned from these conventional firebombings have perhaps even more relevance today in light of current nuclear and conventional arms reduction talks. Instructor should make this point for students to dwell upon.

12. Other points to consider are included in Instructor Notes at APPENDIX IV.



## BIBLIOGRAPHY

1. Child, James W. Nuclear War The Moral Dimension. Social Philosophy and Policy Center and Transaction Inc., 1986.  
(Pages 11-22 are recommended as assigned student reading).
2. Craven, Wesley Frank., and Cate, James Lea. The Army Air Forces in World War II. Volume 3. Chicago: University of Chicago Press, 1951.
3. Daniels, Gordon. Guide to the Reports of the United States Strategic Bombing Survey. I Europe. II The Pacific. London: University College, 1981.
4. Eisenhower, Dwight David. The Eisenhower Diaries. Ed. Robert H. Ferrell, New York: W. W. Norton and Company, 1981.
5. Eisenhower, Dwight David. The Papers of Dwight David Eisenhower. Ed. Alfred D. Chandler Jr., Baltimore: The Johns Hopkins Press, 1970.
6. Frankland, Noble., and Webster, Charles., Sir. The Strategic Air Offensive Against Germany 1939 - 1945. London: Her Majesty's Stationery Office, 1961.
7. Greenfield, Kent Roberts. American Strategy in World War II: A Reconsideration. Baltimore: The Johns Hopkins Press, 1963.
8. The 1989 Information Please Almanac. Boston: Houghton Mifflin Company, 1989, pp. 303 and 314.
9. Irving, David John Cawdell. The Destruction of Dresden. With an introduction by Ira C. Eaker. New York: Holt, Rinehart and Winston, 1964.
10. Levie, Howard S. "Combat Restraints." Navy War College Review, Winter 1977. Reprinted in Course Three Selected Readings, Vol. I, 1989. pp150-153. (Recommended as assigned student reading).
11. Lykke, Arthur F. Jr., ed. Military Strategy: Theory and Application. Carlisle Barracks: U.S. Army War College, 1986. p. 291: "The Development of Nuclear Strategy," by Bernard Brodie.

12. Mappes, Thomas A., and Zembaty, Jane S. Social Ethics: Mobility and Social Policy. New York: McGraw-Hill, 1987.
13. Marshall, S.L.A., Men Against Fire. Gloucester: Peter Smith, 1978.
14. Michie, Allan A. The Air Offensive Against Germany. New York: Henry Holt and Company, 1943.
15. Millis, Walter. Arms and Men: A Study in American Military History. New Brunswick, Rutgers University Press, 1956.
16. Morris, James M. History of the U.S. Army. New York: Exeter Books, 1986.
17. Morrison, Wilber H. Fortress Without a Roof. The Allied Bombing of the Third Reich. New York: St. Martin's Press, 1982.
18. McKee, Alexander. Dresden 1945: The Devil's Tinderbox. New York: Dutton, 1984.
19. Overy, R. J. The Air War 1939 - 1945. New York: Stein and Day, 1980.
20. Paret, Peter, ed. Makers of Modern Strategy from Machiavelli to the Nuclear Age. Princeton: Princeton University Press, 1986. P. 624: "Voices from the Central Blue: The Air Power Theorists," by David MacIsaac.
21. Pearton, Maurice. Diplomacy, War and Technology since 1830. Lawrence: University Press of Kansas, 1982.
22. Rodenberger, Axel. Der Tod von Dresden: Ein Bericht über das Sterben einer Stadt. Dortmund: Franz Muller-Rodenberger, 1953.
23. Schaffer, Ronald, Wings of Judgment: American Bombing in World War II. New York: Oxford University Press, 1985.
24. Sims, Edward H. The Fighter Pilots. London: Cassell and Company Ltd., 1967.
25. Smith, Melden E. The Bombing of Dresden Reconsidered: A Study in Wartime Decision Making. Ann Arbor: University Microfilms, 1976.
26. Turner, James, Can Modern War Be Just? New Haven: Yale University Press, 1984.

27. The United States Strategic Bombing Survey. The United States Strategic Bombing Survey Physical Damage Division Report (ETO) Europe. Physical Damage Division: April, 1947.

28. U.S. Congress. House. Committee on Armed Services, "Unification and Strategy." from Army Navy Journal, 4 March 1950. Reprinted in Casebook: Strategic Response to the New Era (1945-1950) Carlisle Barracks: U.S. Army War College, 1988. pp. 15-28.

29. Weigley, Russell F. The American Way of War: A History of United States Military Strategy and Policy. Bloomington: Indiana University Press, 1973.